Appln. No.: to be assigned

Preliminary Amendment Dated May 6, 2005

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- (Currently Amended) A gearbox, particularly for transmission systems in devices 1. (2) for metering granular and/or materials in powder form, comprising: a pair of shafts, that is, including a drive-input shaft (5) and a drive-output shaft-(6), respectively, there being-provided on the drive-output shaft (6) at least one pair of coaxial freewheels (8), on each of which an end of a respective linkage (10) carrying a movable fulcrum means is active, the opposite end of each linkage being driven with a reciprocating oscillatory motion about the fulcrum means by an eccentric device provided on the drive-input shaft (5)-in order to convert the reciprocating oscillatory motion into an intermittent rotary motion of each freewheel (8)-and consequently-to bring about a rotary motion of the drive-output shaft (6) in a preselected direction of rotation, the drive-input shaft (5) comprising-including at least one pair of cranks with eccentric pins, (11) and each linkage (10) comprising including a respective connecting rod element (13) substantially similar to a connecting rod-having a first end (13a)-connected kinematically to the corresponding freewheel (8) and a second, opposite end (13b) articulated on the respective pin (11) of the crankshaft (5) with a capability for rotary and translational movement relative to the pin-(11), the movable fulcrum means including comprising, for each connecting-rod element (13), a respective fulcrum pin (18), each fulcrum pin (18)-being movable, in adjustable manner, between the opposite ends (13a, 13b) first end and second end of the connecting-rod element (13) so as to define different lever arms (B1, B2) between said ends and consequently to adjust the a transmission ratio between the drive-input shaft (5) and the drive output-shaft (6) of the gearbox, characterized in that and each fulcrum pin (18) has a first end (18a) restrained on a stationary structure of the gearbox and an opposite second end (18b) retrained on the corresponding connecting-rod element (13) to constitute the centre-center of the rotation of said connecting_rod element during the reciprocating oscillatory motion relative to the drive-input shaft, said first end (18a)-of the fulcrum pin (18)-being guided slidably in a wall of a casing constituting the a gearbox housing (3) and the second end (18b) of said fulcrum pin being engaged rotatably and slidably in a seat (21) formed in the corresponding connecting-rod element-(13).
- 2. (Currently Amended) A-The gearbox according to Eclaim 1 in which guide means are provided on each of the connecting-rod elements (13)-for guiding the second connecting-rod end (13b)-on the respective pin (11)-of the crankshaft (5)-during the eccentric rotary motion of the pins (11)-relative to the axis of rotation (X)-of the drive-input shaft-(5).
- 3. (Currently Amended) A-The gearbox according to \in claim 2 in which the guide means comprise, on each connecting-rod element (13), a respective elongate slot-like portion (16) which can be engaged slidably by the corresponding pin (11).

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4. (Currently Amended) A-The gearbox according to \in claim 3 in which the slot-like portion (16)—is elongate in a direction transverse the axis of rotation (X)—of the drive-input shaft (5)—of the gearbox.

- 5. (Currently Amended) A-The gearbox according to Eclaim 3 or Claim 4-in which the slot-like portion (16)-is open at the second end (13b) of the connecting-rod element (13).
- 6. (Currently Amended) A-The gearbox according to Eclaim 5 in which the open slot-like portion (16) is defined by a pair of opposed, parallel and spaced-apart walls (16a, 16b) between which the corresponding pin (11) of the drive-input crankshaft (5) is guided slidably.
- 7. (Currently Amended) A-<u>The gearbox</u> according to \underbrace{c} laim 6 in which at least one sliding block (17) is interposed between the walls (16a, 16b) of the slot (16) and the pin-(11), the sliding block (17) having a first surface (17a) and a second surface (17b) which are in sliding contact with the walls of the slot (16) and with the pin-(11), respectively.
- 8. (Currently Amended) A-The gearbox according to claim 1-one or more of the preceding claims in which the eccentric pins (11)-provided in the cranks of the drive-input shaft (5) are offset by 180° relative to the axis of rotation (X)-of the shaft (5).
- 9. (Currently Amended) A-The gearbox according to claim 1 one or more of the preceding claims in which each of the freewheels (8) comprises an inner ring (8a) keyed to the drive-output shaft and an outer ring (8b) coaxial therewith and capable of rotating freely or with torque transmission, depending on the direction of relative rotation of the rings, each connecting-rod element (13) being articulated, at the first end-(13a), to a collar portion (9) fitted on the outer ring (8b) and fixed for rotation therewith.
- 10. (Currently Amended) A-The gearbox according to \in claim 1 in which the second end (18b)-of the fulcrum pin is guided in the seat (21)-with the interposition of a sliding block (21a)-engaged slidably in the seat (21)-and coupled rotatably with the pin-(11).
- 11. (Currently Amended) A-The gearbox according to Cclaim 1 or Claim 10-in which the seat C1) extends from the first end C13a) of the connecting_rod towards the second, opposite end C13b) of the connecting_rod.
- 12. (Currently Amended) A-The gearbox according to one-or-more of Cclaims 1, 10 and 11 in which actuator means are provided and are active on the fulcrum pins (18) in order to move the position of the fulcrum relative to the connecting rod in an adjustable manner correlated with the a preselected transmission ratio between the drive-input shaft (5) and the drive-output shaft (6) of the gearbox.

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13. (Currently Amended) A-The gearbox according to \in claim 12 in which the actuator means comprise, for each fulcrum pin-(18), a lever mechanism (23)-a free end of which is fixed for rotation with a control shaft (24)-and which is articulated on the fulcrum pin (18)-with a capability for rotary/translational movement between the fulcrum pin (18)-and the lever mechanism-(23).

- 14. (Currently Amended) A-The gearbox according to \in claim 13 in which each fulcrum pin (18) is restrained on the respective lever mechanism (23) with the interposition of a sliding block (26) engaged slidably in a seat (27) of the lever mechanism and coupled rotatably with the fulcrum pin (18).
- 15. (Currently Amended) A metering device for the metered delivery of granular and/or-materials-in-powder form, particularly for machines for dispensing the said materials, comprising a gearbox formed in accordance with claim 1 one or more of the preceding claims for controlling transmission to respective metering members.
- 16. (Currently Amended) A agricultural sowing machine comprising a metering device for the metered delivery of granular seed, formed in accordance with Eclaim 15.
- 17. (New) The gearbox according to claim 1, wherein the gearbox is for transmission systems in devices for metering granular and/or materials in powder form.
- 18. (New) The metering device according to claim 15, wherein the metering device is for the metered delivery of granular and/or materials in powder form.